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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,627	09/05/2000	James Peterson	SCHW-600	7348

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EXAMINER
SHIH, SALLY

ART UNIT	PAPER NUMBER
3624	

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/654,627	Applicant(s) PETERSON ET AL.
	Examiner Sally Shih	Art Unit 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 September 2000</u> .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-26</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-26</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: .

U.S. Patent and Trademark Office

PTO-326 (Rev. 04-01)   Office Action Summary   Part of Paper No. 8

DETAILED ACTION

1.   This application has been reviewed. Original claims 1-26 are pending. The objections

and rejections cited are as stated below:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United
> States before the invention thereof by the applicant for patent, or on an international application by another who
> has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention
> thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999

(AIPA) do not apply to the examination of this application as the application being examined

was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment

by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-6, 8,11-13, 16-20 and 25-26 are rejected under 35 U.S.C. 102(e) as being

anticipated by Luskin et al. (United States Patent Number 5,812,987).

Claim 1:   Luskin et al. discloses a method for characterizing an investment portfolio,

comprising the steps of:

receiving data for taxable investments (Abstract and column 2, lines 29-47);

receiving data for non-taxable investments (Abstract and column 2, lines 29-47); ;

receiving investor profile information (Abstract and column 2, lines 29-47);

performing an optimization which includes the data for the taxable investments, the data for the

non-taxable investments and the investor profile information and which takes into account

capital gains or losses on taxable investments which would be sold (Abstract, Fig. 4-6 and

column 2, lines 29-47); and

providing an investment recommendation (Abstract and column 2, lines 29-47).

Claim 2:   Luskin et al. discloses the step of providing an investment recommendation

includes the step of providing weights which indicate a level of investment for asset classes of

the investments and non-taxable investments (Abstract, Fig. 7, column 8, lines 8-18 and 62-64).

Claim 3:   Luskin et al. discloses the step of providing an investment recommendation includes

the step of providing weights which indicate a level of investment for securities of the taxable

investments and non-taxable investments (Abstract, Fig. 7, column 8, lines 8-18 and 62-64).

Claim 4: Luskin et al. discloses the step of providing an investment recommendation includes

the step of providing dollar amounts to be invested in asset classes of the taxable and non-taxable

investments (Abstract, Fig. 7, column 9, lines 13-22, column 10, lines 31-48).

Claim 5: Luskin et al. discloses the step of providing an investment recommendation includes

the step of providing dollar amounts to be invested in securities of the taxable and non-taxable

investments (Abstract, Fig. 7, column 9, lines 13-22, column 10, lines 31-48).

Claim 6:   Luskin et al. discloses the investor profile information comprises an investor risk

preference (Abstract and Fig. 6).

Claim 8: Luskin et al. discloses the investor profile information comprises time horizon

information (Abstract and Fig. 6).

Claim 11:   Luskin et al. discloses the step of performing an optimization includes the step of

performing numerical differentiation (Abstract, Fig. 5A-5D, column 14, lines 63-67 and column

15, lines 1-25).

Claim 12: Luskin et al. discloses the step of performing an optimization includes the step of

employing a quadratic optimization routine to obtain a solution in a non-quadratic environment

(Abstract, Fig. 5A-5D, column 14, lines 63-67 and column 15, lines 1-25).

Claim 13: Luskin et al. discloses the step of performing an optimization comprises an iterative

non-linear optimization routine (Abstract, Fig. 5A-5D, column 14, lines 63-67 and column 15,

lines 1-25).

Claim 16:   Luskin et al. discloses the optimization routine comprises a quasi-Newton

algorithm wherein a first derivative and a second derivative are approximated (Abstract, Fig. 5A-

5D, column 14, lines 63-67 and column 15, lines 1-25).

Claim 17:   Luskin et al. discloses the optimization routine comprises a first subroutine of

attempting to resolve a flat function problem by running the routine with different sets of initial

values (Abstract, Fig. 5A-5D, column 14, lines 63-67 and column 15, lines 1-25).

Claim 18:   Luskin et al. discloses a function does not optimize with any of the sets of initial

values used in the initial step, further comprising a second subroutine of:

taking a solution for a best case (Abstract, Fig. 5A-5D, 6, 8, column 14, lines 63-67 and column

15, lines 1-25); and

re-running the optimization routine including only those investments with nonzero weights

(Abstract, Fig. 5A-5D, 6, 8,column 14, lines 63-67 and column 15, lines 1-25).

Claim 19: Luskin et al. discloses an optimal solution is found in the first subroutine, further

comprising a third subroutine of re-running the optimization routine to account for minimum

investment values (Abstract, Fig. 5A-5D, 6, 8,column 14, lines 63-67 and column 15, lines 1-25).

Claim 20: Luskin et al. discloses an optimal solution is found in the second subroutine, further

comprising a third subroutine of re- running the optimization routine to account for minimum

investment values (Abstract, Fig. 5A-5D, 6, 8,column 14, lines 63-67 and column 15, lines 1-25).

Claim 25: Luskin et al. discloses the receiving step comprises receiving the customer profile

information at the computing device (Abstract and Fig. 3-4).

Claim 26: Luskin et al. discloses the receiving step comprises receiving the customer profile

information at the computing device (Abstract and Fig. 3-4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 7, 9, 10, 14, 15, 21, 22, 23, 24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Luskin et al. (United States Patent Number 5,812,987) in view of Jones et al.

(United States Patent Number 6,021,397).

Claim 7: Luskin et al. discloses optimization of an investment portfolio (Abstract and Fig. 6).

However, Luskin failed to teach the investor profile information comprises tax bracket

information (Abstract and Fig. 6). Here, Jones et al. teaches the use of tax bracket. (Abstract

and column 5, line 61) It would have been obvious to one of ordinary skilled in the art at the

time the of the Applicant's invention was made to modify Luskin et al.'s teaching to include tax

bracket as part of an investor's profile. One of ordinary skill in the art would have been

motivated to do this because tax consequence is an integral part of investment analysis and

optimization.

Claim 9. The method of claim 1, wherein the investment recommendation comprises a first

recommendation for asset classes of the taxable investments and a second recommendation for

asset classes of the non-taxable investments.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first recommendation for asset classes of the taxable investments and a second recommendation for asset classes of the non-taxable investments. Here, Jones et al. teaches the making of recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss margin. One of ordinary skill in the art would have been motivated to do this because tax consequence is an integral part of investment analysis and optimization in determining net gain or loss.

Claim 10.   The method of claim 1, wherein the investment recommendation comprises a first recommendation for securities of the taxable investments and a second recommendation for securities of the non-taxable investments.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first recommendation for asset classes of the taxable investments and a second recommendation for asset classes of the non-taxable investments. Here, Jones et al. teaches the making of recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss margin. One of ordinary skill in the art would have been motivated to do this because tax

consequence is an integral part of investment analysis and optimization in determining net gain or loss.

Claim 14.   The method of claim 10, wherein the first recommendation for a taxable investment has at least one asset class in common with the second recommendation for a non-taxable investment.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first recommendation for asset classes of the taxable investments and a second recommendation for asset classes of the non-taxable investments. Here, Jones et al. teaches the making of recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss margin. One of ordinary skill in the art would have been motivated to do this because tax consequence is an integral part of investment analysis and optimization in determining net gain or loss.

Claim 15.   The method of claim 10, wherein the first recommendation for a taxable investment has at least one security in common with the second recommendation for a non-taxable in investment.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first recommendation for asset classes of the taxable investments and a second recommendation for asset classes of the non-taxable investments. Here, Jones et al. teaches the making of recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss margin. One of ordinary skill in the art would have been motivated to do this because tax consequence is an integral part of investment analysis and optimization in determining net gain or loss.

Claim 21.   A method for characterizing an investment portfolio, comprising the steps of identifying a universe of taxable investments and non-taxable investments;

receiving customer profile information;

performing an optimization on the data for the taxable investments and for the non-taxable investments which takes into account capital gains or losses on taxable investments which would be sold; and

displaying an investment recommendation.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first recommendation for asset classes of the taxable investments and a second recommendation for

asset classes of the non-taxable investments. Here, Jones et al. teaches the making of

recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have

been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was

made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss

margin. One of ordinary skill in the art would have been motivated to do this because tax

consequence is an integral part of investment analysis and optimization in determining net gain

or loss.

Claim 22.   A method of characterizing an investment portfolio in a system in which a user

communicates with a server by way of a computing device, comprising the steps of:

identifying a universe of taxable investments and non-taxable investments;

receiving customer profile information;

performing an optimization on the data for the taxable investments and for the non-taxable

investments in the server which takes into account capital gains or losses on taxable investments

which would be sold; and

displaying an investment recommendation on the computing device.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract

and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first

recommendation for asset classes of the taxable investments and a second recommendation for

asset classes of the non-taxable investments. Here, Jones et al. teaches the making of

recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have

been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss margin. One of ordinary skill in the art would have been motivated to do this because tax consequence is an integral part of investment analysis and optimization in determining net gain or loss.

Claim 23.   A method of characterizing an investment portfolio, comprising the steps of:

communicating with a server by way of a computing device,

identifying a universe of taxable investments and non-taxable investments;

receiving customer profile information;

performing an optimization in the server on the data for the taxable investments and for the non-taxable investments which takes into account capital gains or losses on taxable investments which would be sold; and

displaying an investment recommendation on the computing device.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first recommendation for asset classes of the taxable investments and a second recommendation for asset classes of the non-taxable investments. Here, Jones et al. teaches the making of recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was

made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss

margin. One of ordinary skill in the art would have been motivated to do this because tax

consequence is an integral part of investment analysis and optimization in determining net gain

or loss.

Claim 24.   A method of characterizing an investment portfolio with a computing device,

comprising the steps of:

identifying a universe of taxable investments and non-taxable investments;

receiving customer profile information;

performing an optimization on the data for the taxable investments and for the non-taxable

investments in the computing device which takes into account capital gains or losses on taxable

investments which would be sold; and displaying an investment recommendation on the

computing device.

Luskin et al. discloses optimization of an investment portfolio and recommendation (Abstract

and Fig. 6). However, Luskin failed to teach the investment recommendation comprises a first

recommendation for asset classes of the taxable investments and a second recommendation for

asset classes of the non-taxable investments. Here, Jones et al. teaches the making of

recommendation with tax consequences. (Abstract and column 10, lines 18-53). It would have

been obvious to one of ordinary skilled in the art at the time the of the Applicant's invention was

made to modify Luskin et al.'s teaching to include tax consequences as part of the gain or loss

margin. One of ordinary skill in the art would have been motivated to do this because tax

consequence is an integral part of investment analysis and optimization in determining net gain or loss.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 6,510,419 B1, USPN 6,484,152 B1, 6,012,044, 6,003,018, 5,784,696 and JP11110447A are cited of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sally Shih whose telephone number is 703-305-8550. The examiner can normally be reached on Flexible Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on 703-308-1065. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7658 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

sys
January 23, 2003   VINCENT MILLIN
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